Appl. No.

: 10/009,792

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently amended) A recombinant plasmid vector which comprises:
 - a kanamycin resistance gene;
 - a promoter;

:

- a nucleotide sequence coding for an endoxylanase signal sequence;
- a nucleotide sequence coding for an oligopeptide consisting of 13 amino acids, wherein including 6 of the 13 amino acids are consecutive histidine residues; and,
 - a human granulocyte colony stimulating factor (hG-CSF) gene.
- 2. (Currently amended) The recombinant plasmid vector of claim 1, wherein the nucleotide sequence eodes coding for an-the oligopeptide which comprises an amino acid sequence of isoleucine glutamic acid glycine arginine (Ile-Glu-Gly-Arg; comprises a nucleic acid encoding SEQ ID NO: 28) within the oligopeptide.
- 3. (Currently amended) A recombinant plasmid vector, pTHKCSFmII represented in Figure 13-which comprises:
 - a kanamycin resistance gene;
 - a Trc promoter;
 - a nucleotide sequence coding for an <u>a Bacillus sp.</u> endoxylanase signal sequence derived from Bacillus sp.;
 - a nucleotide sequence coding for the oligopeptide of SEQ ID NO: 1; and
 - a modified-gene coding for a human granulocyte colony stimulating factor (hG-CSF) <u>lacking its native signal sequence</u>.
- 4. (Currently amended) A microorganism, E. coli transformed with the plasmid vector, pTHKCSFmII of claim 3.
- 5. (Currently amended) The E. coli microorganism of claim 4, wherein the E. coli is selected from the group consisting of E. coli XL1-Blue, E. coli MC4100, E. coli BL21 (DE3), E. coli HB101 and E. coli W3110.

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6. (Currently amended) E. coli MC4100/pTHKCSFmII, deposited as (KCTC 0754BP), wherein said E. coli is transformed with the plasmid vector, pTHKCSFmII of claim 3.

7. **(Original)** A process for preparing a human granulocyte colony stimulating factor, which comprises the steps of:

culturing *E. coli* transformed with the plasmid vector of claim 1 to obtain a human granulocyte colony stimulating factor fusion protein; and,

treating the human granulocyte colony stimulating factor fusion protein with a protease to obtain a human granulocyte colony stimulating factor.

- 8. **(Currently amended)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the plasmid vector of claim 1-is pTHKCSFmII.
- 9. **(Currently amended)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the human granulocyte colony stimulating factor fusion protein is <u>isolated from the protein pool</u> obtained from the culture <u>using a Ni-column</u>.
- 10. **(Original)** The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the protease is Factor Xa.
- 11. **(Previously added)** The recombinant plasmid vector of Claim 3, wherein said vector comprises the nucleotide sequence of SEQ ID NO: 26.
- 12. **(Currently amended)** The recombinant plasmid vector of Claim 3, wherein said modified gene comprises nucleotides 88 to 610 of the nucleotide sequence of SEQ ID NO: 18 and encodes the hG-CSF amino acid sequence of SEO ID NO: 19.
- 13. **(Previously added)** The recombinant plasmid vector of Claim 3, wherein said nucleotide sequence coding for said endoxylanase signal sequence comprises nucleotides 1-84 of SEQ ID NO: 26.